(-0.8 ± 0.5 vs. -0.9 ± 0.7 points). Decrease in voiding score was significantly associated with weight (r = 0.36, p = 0.01) and HOMA (r = 0.42, p<0.01). In the MR group, reduction in storage symptom score was greater than the CD group (-1.6 ± 1.3 vs -1.0 ± 0.8 points), and correlated (r = 0.50, p = 0.02) with greater reduction in saturated fat intake.
Conclusion: Meal replacement-based diets are effective for improving voiding and storage LUTS by reducing insulin resistance and fat intake.

T5:P.040
Increased levels of fasting visfatin in obese women with impaired glucose tolerance

Sumarac-Dumanovic M[1,2], Stamenkovic-Pejkovic D[1], Jeremic D[1], Milin J[1], Cvijovic G[1,2], Polovina S[1], Micic D[1,2]

[1]Clinial Center of Serbia, Clinic for Endocrinology, Center of Obesity, Belgrade, Serbia, [2]School of Medicine, University of Belgrade, Belgrade, Serbia

Introduction: There are reports showed that visfatin levels increase with obesity, diabetes mellitus (DM) and gestational diabetes (GDM). This evidence suggests that visfatin can be stimulated under a hyperglycemic environment. It seems that elevated visfatin concentration in T2DM may be a physiologic protective response to a hyperglycemic environment. The aim of the study was to compare levels of visfatin, adiponectin, glucose tolerance parameters and anthropometric measurements between obese women with normal and impaired glucose tolerance.
Methods: Twenty four obese women with newly diagnosed impaired glucose tolerance (IGT group) and fifty obese normoglycemic women (control group) were recruited in our study (IGT group mean age: 40.1±9.9 yr, mean BMI=35.6±4.8 kg/m^2 vs. control group: mean age 37.3±10.5 yr, mean BMI=36.0±5.0 kg/m^2). We measured fasting insulin, plasma glucose, HOMA-IR, AUC insulin (2h OGTT), fasting adiponectin and fasting visfatin level and anthropometric parameters (BMI and waist).
Results: Fasting visfatin (ng/ml) levels were statistically significantly higher in IGT group compared to control group (58.42=/-8.23 vs.25.45+/-2.21, p<0.05). A significant difference in HOMA-IR (6.45+/-0.93 vs. 4.57+/-0.36, p<0.05) between IGT and control group was detected. Statistically significant difference in fasting adiponectin, AUC insulin, BMI and waist were not detected. Adiponectin was negatively correlated with HOMA-IR in control group (p<0.001), but not in IGT group. There was no statistically significant correlation between fasting visfatin levels and HOMA-IR in both of these two groups.
Conclusion: Fasting plasma visfatin is elevated in women with impaired glucose tolerance, but physiological mechanism on how visfatin affects insulin resistance still remains unclear.

T5:P.041
An Intensive Weight Management Programme for Medically Complex Patients with Obesity

Gardner L, Myint KS

Norfolk and Norwich University Hospitals NHS Foundation Trust, Norwich, United Kingdom

Introduction: Weight management is challenging in medically complex patients with obesity.
Methods: We retrospectively analysed medically complex obese patients entering 16 week intensive weight management programme (IWMP) at our Hospital between January 2012 and July 2012. The programme consists of 8 weeks of a low energy liquid diet (1000–1200 Kcal/d) followed by meal replacement. A close medical supervision, complex dietary and behaviour support were provided. Participants' comorbid state was staged from 0 to 4 according to the Edmonton Obesity Scoring System[1] (EOSS) reflecting complex nature of the cases.
Results: Eighteen of 23 patients completed the programme. Baseline characteristics were body weight 131.9 ± 23.6 kg (mean ± SD) (range 99–178.6 Kg), BMI 43.7±8.2 kg/m^2 (range 37.2–67.8), 13 females, age (49.6±13.3 (range 18–75), number of comorbidities 4.1±1.8 (1 to 7), EOSS score 1.94±0.64, median 2 (1 to 3). Patients include Diabetes (57%) of those 6 (26%) were on insulin, Chronic kidney disease stage 3 or above (13%), heart failure (17%), sleep apnoea (30%), hypertension (65%) and of those 4 (17%) were on 3 or more antihypertensive, hypopituitarinism (13%), osteoarthritis (17%). Mean weight change at week 16 was -11.8 kg (9.0% [-27.2 kg to -2.1 kg]). Insulin requirements dropped on average by 27.3% (n=5, no data on 1 drop out) and antihypertensive requirements reduced from a median of 1 to 0 (n=9).
Conclusion: Patients with complex medical comorbidities were able to lose weight effectively and safely under close supervision, furthermore weight loss is associated with advantageous changes in the use of antidiabetic and antihypertensive medications.

Reference

1. Sharma AF & Kushner RF. A proposed clinical staging system for obesity. *International Journal of Obesity* 2009;33(3): 289–295.

1. Conflict of interest: None
2. Funding: None

T5:P.042
Screening for Cushing's Syndrome in obese patients

Lau E[1,2], Esteves C[1,2], Menezes J[1,2], Cunha F[1], Oliveira J[1], Freitas P[1,2,3], Varela A[1,2,3], Queirós J[1,3], Correia F[1,3,4], Carvalho D[1,2]

[1]Endocrinology, Diabetes and Metabolism Department Center, Hospital S. João, Porto, Portugal, Porto, Portugal, [2]Faculty of Medicine, University of Porto, Portugal, Porto, Portugal, [3]Multidisciplinary Assessment of Surgical Treatment of Morbid Obesity, High Differentiation Centre for Surgical Treatme, Porto, Portugal, [4]Faculty of Nutrition and Food Sciences, University of Porto, Portugal, Porto, Portugal

Introduction: Obesity can coexist with several endocrine disorders, including Cushing's syndrome (CS). Their exclusion is essential before obesity surgical treatment. Although CS is characterized by a broad spectrum of clinical manifestations, a significant number of patients present only with simple obesity.
Objectives: To determine the frequency of CS in an obese population.
Methods: Cross-sectional study of a population of 398 obese adults evaluated at the first attendance of Multidisciplinary Assessment of Surgical Treatment of Obesity. A first CS screening step was performed with 24h-urinary free cortisol (UFC). A second confirmatory step involved 1mg overnight dexametasone supression test (1 mg-DST). CS diagnosis was confirmed by 48-h, 2 mg/d low-dose DST (LDDST) and differential diagnosis by high-dose DST (HDDST), ACTH and imaging studies.
Results: 336 (84.4%) were female and 62 (15.6%) were male, with a mean age of 41.3±10.9 years and a median BMI of 42 kg/m^2 (IQR 40.7-47.6). UFC was increased in16 (4%). UFC was positively correlated with BMI (r = 0.194, p <0.01). 49 patients with clinical signs of CS or increased UFC performed 1mg-DXM: 8 patients had last cortisol >1.8 ug / dL; two tests were simultaneously positive in 3 patients, in whom CS was confirmed. CS was diagnosed in another patient with an UFC of 31.5 ug / dL, but last cortisol of 9.8 ug / dL after LDDST.
Conclusions: CS was confirmed in 4 patients, which gives a prevalence of 1%. There was a statistically significant positive correlation between BMI and UFC.